

Attorney Docket No.: SGAN-004CIP
U.S. Serial No.: 09/892,018

AMENDMENTS

IN THE CLAIMS:

1. (Currently Amended) An ingestible composition comprising a chromic change agent other than a liposome that undergoes a color change one or more times in response to at least one physical or chemical triggering mechanism that is other than a binding pair interaction, wherein said entire composition is ingestible.
2. (Original) The ingestible according to Claim 1, wherein said physical or chemical triggering mechanism is selected from the group consisting of light, mechanical stress, change in temperature, change of pH, change in hydration, change in solvation, change of ionization potential, change of solvents, and change in certain chemical constituents in an ingestible matrix.
3. (Original) The ingestible according to Claim 1, wherein said Ingestible comprises a food, a medicament, a toothpaste, a mouthwash, a gargle or a swab.
4. (Original) The ingestible according to Claim 1, in which said chromic change agent is a mono- or polydiacetylenic compound.
5. (Withdrawn) The ingestible according to Claim 4, wherein said a mono- or polydiacetylenic compound is halogenated to increase a temperature at which said color change occurs.
6. (Original) The ingestible according to Claim 1, wherein said physical or chemical triggering mechanism is a change in a state from the group consisting of temperature, pH, illumination, ionization, protonation, hydrogen bonding, hydration, solvation, exposure to a triggering chemical, exposure to a triggering biochemical, mechanical stress, and a combination of two or more of said physical or chemical triggering mechanisms.

Attorney Docket No.: SGAN-004CIP
U.S. Serial No.: 09/892,018

7. (Original) The ingestible according to Claim 6, wherein said physical triggering mechanism is a modification in temperature and said color change is irreversible.
8. (Original) The ingestible according to Claim 6, wherein said illumination comprises visible light or ultraviolet light at a wavelength of about 254 nanometers.
9. (Original) The ingestible according to Claim 6, wherein said triggering chemical comprises alcohol or acetone.
10. (Original) The ingestible according to Claim 6, wherein said wherein said chemical triggering mechanism is enzymatic activity.
11. (Original) The ingestible according to Claim 10, wherein said enzymatic activity is microbial enzymatic activity.
12. (Original) The ingestible according to Claim 6, wherein said color change one or more times in response to at least one physical or chemical triggering mechanism is sequential.
13. (Original) The ingestible according to Claim 6, wherein said mechanical stress comprises friction, pressure, or sheer.
14. (Original) The ingestible according to Claim 13, wherein said friction is rubbing, sheering, striking, compressing or scratching.
15. (Original) An ingestible composition comprising a diacetylenic compound other than a liposome having a color transition temperature in a range of about -20 to 350°C, wherein said diacetylenic compound is triggered by other than a binding pair interaction to change color from a first color to a second color at said transition temperature wherein said entire composition is ingestible.

Attorney Docket No.: SGAN-004CIP
U.S. Serial No.: 09/892,018

16. (Original) The ingestible according to Claim 15, wherein said color transition temperature is in a range of about -10 to 200°C.
17. (Original) The ingestible according to Claim 16, wherein said ingestible is a solid.
18. (Original) The ingestible according to Claim 16, wherein said ingestible is a liquid.
19. (Original) The ingestible according to Claim 16, wherein said diacetylenic compound is a homopolymer.
20. (Original) The ingestible according to Claim 16, wherein said diacetylenic compound is a copolymer.
21. (Currently Amended) A liquid ingestible composition comprising a diacetylenic compound other than a liposome having a transition temperature in a range of about -20 to 350 °C dispersed therein, wherein said diacetylenic compound is triggered by other than a binding pair interaction to change color from a first color to a second color at said transition temperature and wherein said entire composition is ingestible.
22. (Currently Amended) A solid ingestible composition having a coating comprising a diacetylenic compound other than a liposome having a transition temperature in a range of about -20 to 350 °C, wherein said diacetylenic compound is triggered by other than a binding pair interaction to change color from a first color to a second color at said transition temperature and wherein said entire composition is ingestible.
23. (Original) The solid ingestible according to Claim 22, wherein said diacetylenic compound interpenetrates said solid ingestible.
24. (Currently Amended) A composition comprising a carbohydrate and a diacetylenic

Attorney Docket No.: SGAN-004CIP
U.S. Serial No.: 09/692,018

compound other than a liposome having a transition temperature in a range of about -10 to 200°C, wherein said diacetylenic compound is physiologically acceptable and is triggered by other than a binding pair interaction to change color from a first color to a second color at said transition temperature and wherein said entire composition is ingestible.

26. (Currently Amended) A composition comprising a lipid and a diacetylenic compound other than a liposome having a transition temperature in a range of about -10 to 200°C, wherein said diacetylenic compound is triggered by other than a binding pair interaction to change color from a first color to a second color at said transition temperature and wherein said entire composition is ingestible.
26. (Withdrawn) An ingestible comprising a diacetylenic compound, wherein said diacetylenic compound comprises an end group selected from the group consisting of a carboxylic acid or derivative thereof, an hydroxy group or ether thereof, and an amino group or derivative thereof and wherein said entire composition is ingestible.
27. (Withdrawn) N-ethanol-hexadeca-5,7-diyneamide, or derivatives thereof.
28. (Withdrawn) A diacetylenic compound that undergoes a change color one or more times in response to a change in temperature comprising N-propylamine-eicosa-5,7-diyneamide, or derivatives thereof.
29. (Currently amended) A solid ingestible composition comprising a diacetylenic compound other than a liposome having a transition temperature in a range of about -10 to 200°C and at least one food dye, wherein a combination of said diacetylenic compound and said at least one food dye imparts to said solid ingestible a color of said at least one food dye different from a color of said diacetylenic compound in one of its transitions and wherein said diacetylenic compound is triggered by other than a binding pair interaction to change color from a first color to a second color at said transition temperature and wherein said entire

Attorney Docket No.: SGAN-004CIP
U.S. Serial No.: 09/892,018

composition is ingestible.

30. (Currently amended) A sugar icing composition comprising a diacetylenic compound other than a liposome having a transition temperature in a range of about -20 to 350 °C, wherein said diacetylenic compound is triggered by other than a binding pair interaction to change color from a first color to a second color at said transition temperature and wherein said entire composition is ingestible.
31. (Currently Amended) A lipid ingestible coating composition comprising a diacetylenic compound other than a liposome having a transition temperature in a range of about -20 to 350 °C, wherein said diacetylenic compound is triggered by other than a binding pair interaction to change color from a first color to a second color at said transition temperature and wherein said entire composition is ingestible.
32. (Previously Presented) The ingestible according to Claim 1, wherein said chromic change agent comprises an interpenetrating coating of a diacetylenic compound, said physical triggering mechanisms is a transition temperature in a range of about -10 to 200°C, and wherein said ingestible is selected from the group consisting of medicaments, meats, confections, candy, baby food, cereals, marshmallows, cheese, hot and cold beverages, and baked goods.
33. (Currently Amended) A liquid ingestible composition having dispersed therein a diacetylenic compound other than a liposome having a transition temperature in a range of about -10 to 200°C wherein said diacetylenic compound is triggered by other than a binding pair interaction to change color from a first color to a second color at said transition temperature and said ingestible is selected from the group consisting of hot and cold beverages, formulas and syrups and wherein said entire composition is ingestible.
34. (Withdrawn) The ingestible according to Claim 1, wherein said ingestible is a solid

Attorney Docket No.: SGAN-004CIP
U.S. Serial No.: 09/892,018

food having an adherent coating comprising a design formed by said chromic change agent, wherein said chromic change agent is a polydiacetylenic polymer and said physical mechanism is a modification of temperature.

35. (Withdrawn) The solid food according to Claim 34, wherein said adherent coating comprises rice paper.
36. (Withdrawn) A solid material in contact with food comprising a diacetylenic compound having a transition temperature in a range of about -10 to 200°C.
37. (Withdrawn) The solid material according to Claim 36, wherein said solid material is a packaging material or food container.
38. (Currently Amended) An ingestible composition comprising a diacetylenic compound other than a liposome that indicates freshness or safe status of a food item, wherein said diacetylenic compound is triggered by other than a binding pair interaction to change color from a first color to a second color at said transition temperature and wherein said entire composition is ingestible.
39. (Original) The ingestible according to Claim 38, wherein a color change by said diacetylenic compound indicates maximum achieved cooking temperature, duration of cooking period, duration of storage, or maximum storage temperature.
40. (Original) The ingestible according to Claim 38, wherein a color change by said diacetylenic compound indicates active metabolism occurring within said ingestible.
41. (Original) The ingestible according to Claim 40, wherein said active metabolism is microbial metabolism.
42. (Original) The ingestible according to Claim 41, wherein said microbial metabolism indicates likelihood of a microbial pathogen or food spoilage agent in said

Attorney Docket No.: SGAN-004CIP
U.S. Serial No.: 09/892,018

Ingestible.

Claims 43-83 (Withdrawn)

Claim 84 (Cancelled)

85. (Previously Presented) The ingestible according to Claim 6, wherein said physical triggering mechanism is a modification in temperature and said color change is reversible.